



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,038	03/03/2004	Melissa K. Rath	ATMI-668	4823

24239 7590 11/24/2006

MOORE & VAN ALLEN PLLC

P.O. BOX 13706

Research Triangle Park, NC 27709

EXAMINER

LE, HOA VAN

ART UNIT	PAPER NUMBER
----------	--------------

1752

DATE MAILED: 11/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/792,038

Applicant(s)

RATH ET AL.

Examiner

Hoa V. Le

Art Unit

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/19, 8/17 and 10/2/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-31 and 33-59 is/are pending in the application.
- 4a) Of the above claim(s) 24-31, 33-52 and 58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-23, 53-56 and 59 is/are rejected.
- 7) ☒ Claim(s) Part A of claim 7 and 57 is/are objected to.
- 8) ☒ Claim(s) Part B of claim 7, 24-31, 33-52 and 58 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1752

NEW: This is a correction of the Office action mailed on 06 November 2006.

The Office action mailed on 06 November 2006 has an incorrect Form PTOL-326AE. It should be Form PTOL-326. Therefore, it is corrected in this Office action having a correct Form PTOL-326 with a newly setting response date.

OLD: "This is in response to Papers filed on 19 April, 17 August and 02 October 2006.

I. Applicant's election with traverse of the material (composition) invention of Group I, claims 1-2, 4-23, 53-57 and 59 in the reply filed on 02 October 2006 is acknowledged. The traversal is on the ground(s) that at least a part of the method claims with respect to the composition embodiments is the same as that of the elected composition claims. This is not found persuasive because the record shows that the claims are considered as a whole but not a part of them only as urged.

The requirement is still deemed proper and is therefore made FINAL.

Applicant's arguments filed 02 October 2006 have been fully considered but they are not persuasive.

(1) The record shows that in the Amendment filed on 17 August 2006, the amended claim 59 provides a connection of Group A and Group B together because claim 59 of Group A encompasses at least claim 8 in Group B. Accordingly, it forces the withdrawal of the separation and distinction of Groups A and B as considered, searched and examined in the past.

(2) The record shows that Applicants elect the material (composition) claims of Group A, claims 1-2, 4-7, 10 and 53-57 on 27 March 2006 and request for a rejoinder of the method claims 58-59. However, in the response filed on 17 August 2006, applicants request an examination on the non-elected method invention of Group C, claims 58-59.

For the amendment to claim 59 in “(1)” and arguments for the examination of the non-elected method claims 58-59 “(2)”, it results the restriction made on 30 August 2006 to set forth a clear record. Applicants admit that it is their mistake in the response filed on 02 October 2006 on page 29, third paragraph.

II. CORRECTION: In the Office action mailed on 13 April 2006, on page 6, in paragraph VIII, lines 3 and 4, “58” should be ---57---.

Art Unit: 1752

III. Applicants submit a declaration under Rule 131, that the claimed embodiments are before the applied date of 18 June 2003 of Yokoi et al on the record. Accordingly, the rejections in the Office action mailed on 13 April 2006 are withdrawn.

IV. The record shows that applicants elect species of Formula G. The elected species of Formula G are continuously considered and searched while the application is continuously under examinations. During the course of searching for the elected species, other are found and applied. The remaining non-elected species are not now considered, searched or examined until all of the applied species on the record are overcome. The applied references are on the found and available art since applicants already have their elections with respect to the composition and its species on the record.

V. Applicants' prior art submission filed on 19 April 2006 has been considered.

VI. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

Art Unit: 1752

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 8-9, 11-13, 22, 37-38, 40-42 and 51 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7, 9-17, 21-22 and 33-48 as amended on 25 August 2006 of copending Application No. 10/389,214. Although the conflicting claims are not identical, they are not patentably distinct from each other because they contain the same or obviously chemical ingredients and the same or substantially the same amounts. The ability or capability of "removing..." or the like is a property of a material and considers inherent. For a patentability of a property of a material embodiment, it is allowed by law to request and require applicants to convincingly show or provide an evidence to the contrary since arguments alone are not a factual evidence in accordance with the authority stated in *In re Schreiber*, 44 USPQ2d 1429. An allowed claim or patent would have no value when someone later arrives to the same or obviously the same claimed functional property as set forth on the record using all possible combinations of the teachings and suggestions in the applied reference. A showing should be submitted in the next response to this Office action in order for it to be considered timely.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

V. It is a record that Application Serial No. 10/389,214 has its Publication No. 2004/0180300 being applied as followed:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-9, 11-13 and 22 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Minsek et al (2004/0180300).

Minsek et al disclose and teach a cleaning composition comprising a sufficient amount of a strong base, a sufficient amount of an oxidant, a sufficient amount of a chelator, a sufficient amount of a co-solvent, a sufficient amount of a surfactant and a sufficient amount of water. Please see the whole disclosure of the applied reference, especially at paragraphs [0009], [0010], [0013], [0015], [0017], [0018] to [0021], [0023] to [0025]. The ability or capability of “removing...” or the like is a property of a material and considers inherent. For a patentability of a property of a material embodiment, it is allowed by law to request and require applicants to convincingly show or provide an evidence to the contrary since arguments alone are not a factual evidence in accordance with the authority stated in *In re Schreiber*, 44 USPQ2d 1429. An allowed claim or patent would have no value when someone later arrives to the same or obviously the same claimed functional property as set forth on the record using all possible combinations of the teachings and suggestions in the applied reference. A showing should be submitted in the next response to this Office action in order for it to be considered timely.

Art Unit: 1752

Since Minsek et al are reasonably disclose, teach and suggest the claimed embodiments, the above claims are found to be anticipated by Minsek et al.

In an alternative, the remote teachings and suggestions are reasonably found to be rendered prima-facie obvious by Minsek et al.

VI. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-9, 11-13 and 22 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Skee (6,599,370).

Skee discloses and teaches a cleaning composition comprising a sufficient amount of a strong base, a sufficient amount of an oxidant, a sufficient amount of a chelator, a sufficient amount of a co-solvent, a sufficient amount of a surfactant and a sufficient amount of water. Please see the whole disclosure of the applied reference, especially at col.4:28-31, 37, 51-52, 5:55-65, 6:42-50 and 54 to 7:39, 8:4 to 25 and 65 to 10:4, 33-40, 50 to 11:13, 37-44 9:1-20. Since Skee is reasonably disclose, teach and suggest the claimed embodiments, the above claims are found to be anticipated by Skee. The ability or capability of “removing...” or the like is a property of a material and considers inherent. For a patentability of a property of a material embodiment, it is allowed by law to request and require applicants to convincingly show or provide an evidence to the contrary since arguments alone are not a factual evidence in accordance with the authority stated in *In re Schreiber*, 44 USPQ2d 1429. An allowed claim or patent would have no value when someone later arrives to the same or obviously the same claimed functional property as set forth on the record using all possible combinations of the teachings and suggestions in the applied reference. A showing should be submitted in the next response to this Office action in order for it to be considered timely. Since Minsek et al are reasonably disclose, teach and suggest the claimed embodiments, the above claims are found to be anticipated by Minsek et al.

In an alternative, the remote teachings and suggestions are reasonably found to be rendered prima-facie obvious by Skee.

VII. Claims 1-2, 4-6, 10, 14-21, 23, 53-56 and 59 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Skee (6,599,370) considered in view of En et al (2004/0134682), Yokoi et al (2005/0106492) and Moore (6,551,973).

Skee discloses, teaches and suggest a cleaning composition comprising a sufficient amount of a strong base, a sufficient amount of an oxidant, a sufficient amount of a chelator, a sufficient amount of a co-solvent, a sufficient amount of a surfactant and a sufficient amount of water. Please see the whole disclosure of the applied reference, especially at col.4:28-31, 37, 51-52, 5:55-65, 6:42-50 and 54 to 7:39, 8:4 to 25 and 65 to 10:4, 33-40, 50 to 11:13, 37-44 9:1-20. Since Skee is reasonably disclose, teach and suggest the claimed embodiments, the above claims are found to be anticipated by Skee. The ability or capability of “removing...” or the like is a property of a material and considers inherent. For a patentability of a property of a material embodiment, it is allowed by law to request and require applicants to convincingly show or provide an evidence to the contrary since arguments alone are not a factual evidence in accordance with the authority stated

Art Unit: 1752

in *In re Schreiber*, 44 USPQ2d 1429. An allowed claim or patent would have no value when someone later arrives to the same or obviously the same claimed functional property as set forth on the record using all possible combinations of the teachings and suggestions in the applied reference. A showing should be submitted in the next response to this Office action in order for it to be considered timely.

Skee discloses, teaches and suggests that an alkali metal salt alkaline agent can be used on col.7:27-28 and 8:16-17 but do not specify potassium hydroxide alkaline agent. However, it is known in the art to use potassium hydroxide alkaline agent to provide an alkalinity and stripping power. Evidence can be seen in at least *En et al* at paragraph 0550, 0600, 0612, 0620, 0653, 0714, 0754 and 0774.

Skee does not specify methylethylamine as that in claim 21. However, it is known in the art to use methylethylamine as a mild alkaline agent and a copper wiring corrosive protection. Evidence can be seen in *Yokoi et al* at paragraph 0026.

Skee does not specify benzyltrimethylammonium hydroxide alkaline agent as that in claims 54-55. However, it is known to used benzyltrimethylammonium hydroxide alkaline agent to provide an alkalinity and to remove an organic photoresist. Evidence can be seen in at least *Moore et al* at col.2:35-42.

Since the above references are all related to cleaning, tripping and/or removing compositions, it would have been obvious to one having ordinary skill in

Art Unit: 1752

the art at the time the invention was made to use potassium hydroxide alkaline agent for a reasonable expectation of obtaining an alkalinity and stripping power, methylethylamine mild alkaline agent for a reasonable expectation of obtaining a mild alkalinity and a copper wiring corrosive protection and benzyltrimethylammonium alkaline agent for a reasonable expectation of obtaining an alkalinity and stripping power as disclosed, taught and suggested in the secondary references.

VIII. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 with respect to the elected and applied species are rejected under 35 U.S.C. 102(b) as being anticipated by Carati et al (5,908,968).

Carati et al disclose and teach a clear alkaline aqueous composition comprising a sufficient amount of a quaternary ammonium base, a sufficient amount of an alkali metal salt base, an additive and a sufficient amount of water. Please see col.6:30-31. The ability or capability of “removing...” or the like is a

Art Unit: 1752

property of a material and considers inherent. For a patentability of a property of a material embodiment, it is allowed by law to request and require applicants to convincingly show or provide an evidence to the contrary since arguments alone are not a factual evidence in accordance with the authority stated in *In re Schreiber*, 44 USPQ2d 1429. An allowed claim or patent would have no value when someone later arrives to the same or obviously the same claimed functional property as set forth on the record using all possible combinations of the teachings and suggestions in the applied reference. A showing should be submitted in the next response to this Office action in order for it to be considered timely. Since Carati et al is reasonably disclosed and taught the claimed composition, the above claims are found to be anticipated by Carati et al since composition, per se, as claimed is shown to be known and old. Therefore, there is no patentable value in an old composition as claimed. However, the language "removing..." would be given full value in a method or process claim.

IX. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 1752

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-5 and 10 with respect to the elected and applied species are rejected under 35 U.S.C. 102(a) as being anticipated by Miller et al (6,572,743).

Miller et al disclose and teach a clear alkaline aqueous composition comprising a sufficient amount of a quaternary ammonium base, a sufficient amount of potassium hydroxide, an additive and a sufficient amount of water. Please see col.13:8-16. The ability or capability of “removing...” or the like is a property of a material and considers inherent. For a patentability of a property of a material embodiment, it is allowed by law to request and require applicants to convincingly show or provide an evidence to the contrary since arguments alone are not a factual evidence in accordance with the authority stated in *In re Schreiber*, 44 USPQ2d 1429. An allowed claim or patent would have no value when someone later arrives to the same or obviously the same claimed functional property as set forth on the record using all possible combinations of the teachings and suggestions in the applied reference. A showing should be submitted in the next response to this Office action in order for it to be considered timely. Since Miller et al is reasonably disclosed and taught the claimed composition, the above claims are found to be anticipated by Miller et al since composition, per se, as claimed is

Art Unit: 1752

shown to be known and old. Therefore, there is no patentable value in an old composition as claimed. However, the language “removing...” would be given full value in a method or process claim.

X. Sullivan (3,980,587) is cumulative but may be later applied when an amendment is made.

XI. Chemical ingredients and their amounts of the elected Formula G in claim 7 part A have been considered and searched. The same are with it's closely related claims 57. In the absence of a pertinent reference again the elected Formula G and claim 57, no rejection is made. However, the elected Formula G and claim 57 are objected to but would be allowable if each of them is rewritten in an independent form.

XII. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa V. Le whose telephone number is 571-272-1332.

The examiner can normally be reached from 6:30 AM to 4:30 PM on Monday through Thursday and about the same time of most Friday.

Art Unit: 1752

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526.

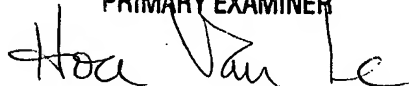
Applicants may file a paper by (1) fax with a central facsimile receiving number 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hoa V. Le
Primary Examiner
Art Unit 1752

HVL
01 November 2006"

NEW: 20 November 2006

HOA VAN LE
PRIMARY EXAMINER

A handwritten signature in cursive script that reads "Hoa Van Le".